

# MBNMS Permit Report

## June 7, 2010



MULTI-2010-005

Effective Date: 06/01/2010    Expiration Date: 12/31/2012

Project Title: Baseline Monitoring of Ecosystem and Socioeconomic Indicators for MPAs along the North Central Coast of California: Sandy Beaches

Applicant Name: Dr. Karina Nielsen

Affiliation: Sonoma State University

**Project Summary:**

Sandy beaches and adjacent surf zone habitats are part of the Marine Protected Areas (MPAs) network implemented in the North Central California (NCC) by the CA Department of Fish and Game. Baseline characterization and long-term monitoring are part of the effectiveness assessment of the newly established MPAs.

The project PIS propose to conduct a comprehensive baseline biodiversity survey and evaluate prospective long-term ecosystem indicators at 12 sandy beaches (6 MPAs and 6 reference sites (only 2 MPAs and 2 reference sites are within Marine Sanctuary boundaries) characteristic of the large sandy beaches and pocket beaches (< 1 km of shoreline) in the NCC region. Quantitative measurements using standard methods (core samples) will include 1) species richness and abundance of intertidal macroinvertebrates and 2) biomass and population size structure of sand crabs and wrack-associated invertebrates. Abundance and species composition of shorebirds and macrophyte wrack and character

**Location Description - Proposed:**

Proposed locations within the Sanctuaries include Duxbury SMCA, Stinson Beach, Montara State Beach, and Ross Cove (Montara SMR).

**Latest Event:**

05/24/2010 Permit issued

MULTI-2009-005-A1

Effective Date: 09/21/2009    Expiration Date: 12/31/2011

Project Title: Ecology and populations dynamics of white sharks in the north eastern Pacific

Applicant Name: Dr. Barbara Block

Affiliation: Stanford University



**Project Summary:**

Sharks will be attracted to the surface using a seal decoy and lured close to a small research boat. To overcome its fear of the boat, the researchers will dispense a small amount of marine mammal blubber scent into the water to heighten the shark's hunger motivation. Satellite and acoustic tags will be placed externally using a dart applied to the dorsum. To estimate foraging success and energy budgets, a small number of stomach tags will be deployed internally via feeding with the tag wrapped in a piece of seal or whale meat (under NMFS authorization). Shark attracting will occur each season within sanctuary waters between September 1 and March 1 except at the Farallon Islands where field work will extend no later than Nov 30. Individuals will be catalogued and monitored using individual fin morphology images taken with still and video cameras. Over the next 2 years up to 100 individuals may be tagged broken down by tag/sample type as follows: Acoustic tags: 40 per year - up

**Location Description - Proposed:**

Seabed disturbance in the GFNMS for installation of one underwater monitoring devices offshore Point Reyes headlands (distance of 1/4 mile or greater from shore), two underwater monitoring devices offshore South Farallon Islands, one underwater device offshore Tomales Point (distance of 1/4 mile or greater from shore), one underwater device offshore elephant rock (distance of 1/4 mile or greater from shore), one underwater device offshore double point. Seabed disturbance in the MBNMS for installation of two underwater monitoring devices offshore Ano Nuevo Island.

Shark attraction activities in the GFNMS offshore Pt Reyes and Farallon Islands and in MBNMS off Ano Nuevo Island, California.

**Latest Event:**

12/08/2009 Additional information requested

MBNMS-2010-017

Effective Date: 07/08/2010 Expiration Date: 07/31/2010

Project Title: Zooplankton at the Base of the Particle Maximum: Gatekeepers of the Vertical Flux?

Applicant Name: Dr. David Checkley

Affiliation: Scripps Institution of Oceanography

**Project Summary:**

This research includes the deployment, maintenance, and recovery of scientific equipment including autonomous biological profiler floats and Acoustic Doppler Current Profilers to better understand



the role of zooplankton in the vertical flux of particles, and factors that affect zooplankton behavior and ecology.

Location Description - Proposed:  
Monterey Bay area (near M1 Buoy)

Latest Event:  
06/04/2010 Application received

MBNMS-2010-016

Effective Date: 08/20/2010    Expiration Date: 12/01/2010

Project Title: Adopt a Drifter Deployment in the California Current

Applicant Name: Dr. Diane Stanitski

Affiliation: NOAA Climate Program Office, Climate Observation

**Project Summary:**

As Part of the Blue Ocean Film Festival, NOAA's Adopt a Drifter program will be deploying up to two climate change buoys within the MBNMS for research & education purposes.

Each drifting buoy is equipped with a sea surface temperature sensor and GPS unit (and occasionally an atmospheric pressure sensor), and the drifter data are sent to satellites and then to data collecting centers where it can be readily accessed on-line. Educators develop lessons using the drifting buoy data and, just as importantly, tools to communicate effectively with partnering students abroad. Students in the teachers' classes use drifter tracking charts to observe and plot the coordinates of the drifter as it moves freely in the surface ocean currents. Through the ADP, teachers and students can more easily make connections between the sea surface temperature data accessed on line and other processes connected to the oceans and atmosphere, including ocean circulation and wind patterns.

**Location Description - Proposed:**

The drifting buoy deployment will be deployed at a location to be determined within the MBNMS.

Latest Event:  
06/03/2010 Permit issued

MBNMS-2010-013

Effective Date: 05/01/2010    Expiration Date: 06/30/2010



Project Title: The Use of Passive Acoustics to Record Killer Whale (*Orcinus orca*) Vocalizations in Monterey Bay.

Applicant Name: Ms. Kelly Newman

Affiliation: University of Alaska Fairbanks

Project Summary:

One passive acoustic receiver will be deployed on, and retrieved from, the continental shelf in Monterey Bay.

Location Description - Proposed:

Continental shelf, on the east side of Soquel Canyon

Latest Event:

05/02/2010 Permit signed copy received

MBNMS-2010-012

Effective Date: 06/01/2010    Expiration Date: 08/31/2010

Project Title: Front Dynamics and Mixing on the Northern Monterey Bay Inner Shelf

Applicant Name: Dr. Clifton Woodson

Affiliation: Stanford University

Project Summary:

This research includes the installation, maintenance, and recovery of four mooring arrays (ADCP, wave gauge, CTD, thermistor) in the vicinity of Sandhill Bluff (Davenport) to determine front dynamics and mixing.

Location Description - Proposed:

Nearshore area in the vicinity of Sandhill Bluff (Davenport)

Latest Event:

05/14/2010 Permit signed copy received



MBNMS-2010-011

Effective Date: 06/01/2010    Expiration Date: 11/30/2012

Project Title: Lateral Mixing and Dispersion on the Inner Shelf

Applicant Name: Dr. Stephen Monismith

Affiliation: Stanford University

**Project Summary:**

This project includes a suite of field observations (instrument moorings, dye tracer, AUV) to elucidate and quantify mixing processes on the inner shelf and directly examine the consequences of these processes on inner shelf biological distributions.

The approach is to conduct two, 2-week long field experiments on the inner shelf of northern Monterey Bay. After deploying an array of moored instruments to measure physical, optical and acoustical properties, applicant will release a harmless tracer dye, in separate controlled releases, within the bottom boundary layer, stratified interior, and surface mixed layer during both the early and late portions of the upwelling season in northern California.

Applicant will measure the dye's spatial and temporal distribution using an autonomous underwater vehicle equipped with a fast response fluorometer, as well as a tow body equipped with a fluorometer and ancilliary instrumentation that measure concurrently biological and geochemical pr

**Location Description - Proposed:**

Northern Monterey Bay

**Latest Event:**

05/25/2010 Permit signed copy received

MBNMS-2010-007

Effective Date: 07/05/2010    Expiration Date: 08/01/2015

Project Title: The Feast of Lanterns Annual Fireworks Celebration in Pacific Grove

Applicant Name: Ms. Sue Renz

Affiliation: Pacific Grove Feast of Lanterns

**Project Summary:**



Fireworks will be fired from the recreational trail at the foot of Fountain Avenue at approximately 9: 15 pm. PyroSpectaculars is the vendor, and will be detonating 567 pyrotechnic shells.

Location Description - Proposed:

Fireworks will be fired from the recreational trail at the foot of Fountain Avenue

Latest Event:

05/05/2010 Record closed

MBNMS-2009-014

Effective Date:      Expiration Date:

Project Title: State Parks MPWC Search & Rescue Operations, Monterey District

Applicant Name: Mr. Eric Abma

Affiliation: California Department of Parks & Recreation, (CDPR)

Project Summary:

Develop and maintain public agency MPWC SAR operating skills critical for hazardous incident response at sea under adverse conditions.

Public safety agencies bordering the MBNMS have a primary mission to protect and save human life in coastal waters within sanctuary boundaries. SAR professionals have found MPWC to be uniquely suited for rescuing people in distress from high surf and nearshore areas due to the vessels' high-speed, shallow draft, instant thrust capabilities, and excellent maneuverability and survivability in high-energy ocean environments.

In order to maximize use and safe operation of these craft under such conditions, a robust training and proficiency curriculum must be maintained in the area where the craft will be deployed for emergency response. Operators must be familiar with the areas and sea conditions they will be called upon to enter under duress to complete search and rescue missions.

Location Description - Proposed:

Area of Responsibility (AOR): Shoreline and coastal waters from the Pajaro River to Garrapata Creek.

Training will occur within the Asilomar State Marine Reserve and adjacent to the California Coastal National Monument, Salinas River National Wildlife Refuge, Salinas River State Beach,



Fort Ord Dunes State Park, Monterey South Dunes Beach, Monterey State Beach, and Asilomar State Beach.

Training will also occur within the MBNMS coastal Overflight Restriction Zone at Moss Landing.

Latest Event:  
04/02/2009 Additional information received

MBNMS-2008-027

Effective Date:      Expiration Date:

Project Title: Pacific Grove Bathhouse Remodel, addition, and ADA improvements to Lovers Point Park

Applicant Name: Ms. Sarah Hardgrave

Affiliation: City of Pacific Grove

Project Summary:

The proposed project includes a remodel and addition to the Old Bathhouse restaurant building and construction of ADA improvements to the building and adjoining path and walkways. The project includes renovation of the existing building to allow expansion. The existing public restrooms will be removed and relocated. The project also includes replacement of fencing, modifications to the volleyball court, and interpretive signage.

Location Description - Proposed:

The project site encompasses a portion of Lovers Point Park located in the City of Pacific Grove, adjacent to the south shore of the Monterey Bay

Latest Event:  
10/20/2008 Additional information received

MBNMS-2006-005

Effective Date:      Expiration Date:

Project Title: Duke Energy Moss Landing Power Plant NPDES Permit





additional information needed

Applicant Name: RWQCB

Affiliation: Regional Water Quality Control Board

Project Summary:

Ocean discharge from the power plant. The Moss Landing Power Plant NPDES permit has been on Administrative Extension since October 2005. Water Board staff plans to propose a renewed NPDES for the facility in 2007, after the federal court issues its decision regarding litigation over Clean Water Act Section 316(b) regulations.

Also the existing permit for the MLPP is still in litigation due to a lawsuit by Voices of the Wetlands.

A renewed MLPP permit will not be enacted until the courts resolve these issues.

Location Description - Proposed:

Moss Landing Power Plant  
Ocean Outfall

Latest Event:

09/15/2006 Additional information requested

